

CLAIMS

1. A honeycomb filter for purifying exhaust gases which has a structure in which:

5 a plurality of rectangular columnar porous ceramic members are combined with one another through a sealing material layer to constitute a ceramic block, each of the above-mentioned rectangular columnar porous ceramic member comprising a number of through holes that are placed in parallel with one another
10 in the length direction with partition wall interposed therebetween;

 a sealing material layer is also formed on a circumference portion of said ceramic block; and

 said partition wall which separates said through holes
15 functions as a filter for collecting particulates,

 wherein, on a cross section perpendicular to the length direction of said porous ceramic member of said ceramic block, the maximum width L (mm) of the crisscross portion of said sealing material layer is 1.5 to 3 times greater than the minimum width
20 1 (mm) of said sealing material layer.

2. The honeycomb filter for purifying exhaust gases according to claim 1,

 wherein the outer circumferential face in the length
25 direction has a curved face.

3. The honeycomb filter for purifying exhaust gases according to claim 1 or 2,

 wherein on a cross section perpendicular to the length
30 direction of the porous ceramic member of the ceramic block, the maximum width L (mm) of the crisscross portion of said sealing material layer is 1.5 to 3 times greater than the minimum width 1 (mm) of said sealing material layer, with respect to the crisscross portions of all the sealing material layer.

4. The honeycomb filter for purifying exhaust gases according to any one of claims 1 to 3,
wherein a catalyst supporting film is applied to the porous ceramic member.
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5. The honeycomb filter for purifying exhaust gases according to any one of claims 1 to 4,
wherein a catalyst is applied to the porous ceramic member.
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6. The honeycomb filter for purifying exhaust gases according to any one of claims 1 to 5,
wherein a catalyst supporting film is applied to the sealing material layer.
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7. The honeycomb filter for purifying exhaust gases according to any one of claims 1 to 6,
wherein a catalyst is applied to the sealing material layer.